

REMARKS

Claims 1-20 were previously pending in this patent application. Claims 1-20 stand rejected. Herein, Claims 1, 2, 8, 9, and 15 have been amended. Support for the claim amendments may be found in, but is not limited to, Figures 2-4 and pages 4-14 of the specification. Accordingly, after this Amendment and Response After Final Action, Claims 1-20 remain pending in this patent application. Further examination and reconsideration in view of the claims, remarks, and arguments set forth below is respectfully requested.

35 U.S.C. Section 102(e) Rejections

Claims 1 and 8 stand rejected under 35 U.S.C. 102(e) as being anticipated by Lake, U.S. Patent Application Publication No. US2004/0045003 (hereafter Lake). These rejections are respectfully traversed.

Focusing on Independent Claim 1, it is respectfully submitted that Lake fails to disclose all the claim limitations of Independent Claim 1. In particular, Independent Claim 1 recites, “enabling any task irrespective of priority value to request a particular waiting period during execution of said task...utilizing preemptive multitasking to enable each task to preempt execution of another task based on said requested particular waiting period elapsing, said priority values, and a plurality of statuses associated with said tasks; and utilizing cooperative multitasking to enable each task to suspend execution of itself in a cooperative manner for duration of said requested particular waiting period,” (emphasis added). That is, utilization of preemptive multitasking and cooperative multitasking enables each task to execute both preemptively and cooperatively. In contrast, Lake discloses tasks that execute only preemptively (e.g., [0003],

[0014], [0023], [0036]) or only cooperatively by voluntarily suspending or yielding control of the CPU (e.g., [0006], [0013], [0014], [0023], [0038], [0041] – [0043]) or only in a non-preemption manner by preventing other tasks of a non-preemption group from preemptively gaining control of the CPU when one task of the non-preemption group is executing (e.g., [0005], [0037]).

Moreover, Lake clearly distinguishes cooperative tasks from preemptive tasks by stating in paragraph [0023] that a task that may voluntarily yield control of the processor is known as a cooperative task, in contrast to a preemptive task. Further, Lake emphasizes the distinction between cooperative tasks and preemptive tasks by describing in paragraphs [0016] – [0021] tasks being divided into predetermined priority categories, including preemptive tasks and at least one task (i.e., cooperative task) that voluntarily yields control of the processor. Lake never describes enabling each task to execute both preemptively and cooperatively, as in Independent Claim 1.

As discussed above, the reference Lake does not disclose all the claim limitations of Independent Claim 1. Therefore, it is respectfully submitted that Independent Claim 1 is not anticipated by Lake and is in condition for allowance.

Independent Claim 8 is directed to computer-readable medium comprising computer-executable instructions stored therein for performing a method of executing a plurality of tasks of different priority values. Independent Claim 8 recites limitations similar to limitations of Independent Claim 1. Specifically, Independent Claim 8 recites, "enabling any task irrespective of priority value to request a particular waiting period during execution of said task...utilizing

preemptive multitasking to enable each task to preempt execution of another task based on said requested particular waiting period elapsing, said priority values, and a plurality of statuses associated with said tasks; and utilizing cooperative multitasking to enable each task to suspend execution of itself in a cooperative manner for duration of said requested particular waiting period," (emphasis added) as is recited in Independent Claim 1. For the reasons discussed above with respect to Independent Claim 1, Lake fails to disclose the cited claim limitations of Independent Claim 8. Therefore, Independent Claim 8 is not anticipated by Lake and is in condition for allowance for the reasons discussed in connection with Independent Claim 1.

35 U.S.C. Section 103(a) Rejections

Claims 2-5 and 9-12 stand rejected under 35 U.S.C. 103(a) as being unpatentable over Lake, U.S. Patent Application Publication No. US2004/0045003 (hereafter Lake) in view of Shi et al., U.S. Patent No. 6,757,897 (hereafter Shi). These rejections are respectfully traversed.

Dependent Claims 2-5 are allowable over Lake because they are dependent on Independent Claim 1, which is allowable over Lake. Moreover, Shi fails to disclose claim limitations of Independent Claim 1 not shown by Lake. In particular, Shi does not disclose, "enabling any task irrespective of priority value to request a particular waiting period during execution of said task...utilizing preemptive multitasking to enable each task to preempt execution of another task based on said requested particular waiting period elapsing, said priority values, and a plurality of statuses associated with said tasks; and utilizing cooperative multitasking to enable each task to suspend execution of itself in a

cooperative manner for duration of said requested particular waiting period,” (emphasis added) as recited in Independent Claim 1. Therefore, Independent Claim 1 is patentable over the combination of Lake and Shi and is in condition for allowance. Since Dependent Claims 2-5 depend from Independent Claim 1, Dependent Claims 2-5 are patentable over the combination of Lake and Shi and are in condition for allowance.

Dependent Claims 9-12 are allowable over Lake because they are dependent on Independent Claim 8, which is allowable over Lake. Moreover, Shi fails to disclose claim limitations of Independent Claim 8 not shown by Lake. In particular, Shi does not disclose, “enabling any task irrespective of priority value to request a particular waiting period during execution of said task...utilizing preemptive multitasking to enable each task to preempt execution of another task based on said requested particular waiting period elapsing, said priority values, and a plurality of statuses associated with said tasks; and utilizing cooperative multitasking to enable each task to suspend execution of itself in a cooperative manner for duration of said requested particular waiting period,” (emphasis added) as recited in Independent Claim 8. Therefore, Independent Claim 8 is patentable over the combination of Lake and Shi and is in condition for allowance. Since Dependent Claims 9-12 depend from Independent Claim 8, Dependent Claims 9-12 are patentable over the combination of Lake and Shi and are in condition for allowance.

Claims 6-7, 13-15, and 19-20 stand rejected under 35 U.S.C. 103(a) as being unpatentable over Lake, U.S. Patent Application Publication No.

US2004/0045003 (hereafter Lake) in view of Bower, U.S. Patent No. 7,051,331 (hereafter Bower). These rejections are respectfully traversed.

Dependent Claims 6-7 are allowable over Lake because they are dependent on Independent Claim 1, which is allowable over Lake. Moreover, Bower fails to disclose claim limitations of Independent Claim 1 not shown by Lake. In particular, Bower does not disclose, “enabling any task irrespective of priority value to request a particular waiting period during execution of said task...utilizing preemptive multitasking to enable each task to preempt execution of another task based on said requested particular waiting period elapsing, said priority values, and a plurality of statuses associated with said tasks; and utilizing cooperative multitasking to enable each task to suspend execution of itself in a cooperative manner for duration of said requested particular waiting period,” (emphasis added) as recited in Independent Claim 1. Therefore, Independent Claim 1 is patentable over the combination of Lake and Bower and is in condition for allowance. Since Dependent Claims 6-7 depend from Independent Claim 1, Dependent Claims 6-7 are patentable over the combination of Lake and Bower and are in condition for allowance.

Dependent Claims 13-14 are allowable over Lake because they are dependent on Independent Claim 8, which is allowable over Lake. Moreover, Bower fails to disclose claim limitations of Independent Claim 8 not shown by Lake. In particular, Bower does not disclose, “enabling any task irrespective of priority value to request a particular waiting period during execution of said task...utilizing preemptive multitasking to enable each task to preempt execution of another task based on said requested particular waiting period elapsing, said priority values, and a plurality of statuses associated with said tasks; and utilizing

cooperative multitasking to enable each task to suspend execution of itself in a cooperative manner for duration of said requested particular waiting period,” (emphasis added) as recited in Independent Claim 8. Therefore, Independent Claim 8 is patentable over the combination of Lake and Bower and is in condition for allowance. Since Dependent Claims 13-14 depend from Independent Claim 8, Dependent Claims 13-14 are patentable over the combination of Lake and Bower and are in condition for allowance.

Now discussing Independent Claim 15, it is respectfully submitted that Independent Claim 15 is patentable over the combination of Lake and Bower because the combination of Lake and Bower fails to disclose all the claim limitations of Independent Claim 15. In particular, Independent Claim 15 recites, “wherein said BIOS is operative to enable any initialization task irrespective of priority value to request a particular waiting period during execution of said initialization task... wherein said BIOS uses said preemptive multitasking to enable each initialization task to preempt execution of another initialization task based on said requested particular waiting period elapsing, said priority values, and a plurality of statuses associated with said initialization tasks, and wherein said BIOS uses said cooperative multitasking to enable each initialization task to suspend execution of itself in a cooperative manner for duration of said requested particular waiting period,” (emphasis added). That is, the BIOS’s utilization of preemptive multitasking and cooperative multitasking enables each initialization task to execute both preemptively and cooperatively. In contrast, Lake discloses tasks that execute only preemptively (e.g., [0003], [0014], [0023], [0036]) or only cooperatively by voluntarily suspending or yielding control of the CPU (e.g., [0006], [0013], [0014], [0023], [0038], [0041] – [0043]) or only in a

non-preemption manner by preventing other tasks of a non-preemption group from preemptively gaining control of the CPU when one task of the non-preemption group is executing (e.g., [0005], [0037]).

Moreover, Lake clearly distinguishes cooperative tasks from preemptive tasks by stating in paragraph [0023] that a task that may voluntarily yield control of the processor is known as a cooperative task, in contrast to a preemptive task. Further, Lake emphasizes the distinction between cooperative tasks and preemptive tasks by describing in paragraphs [0016] – [0021] tasks being divided into predetermined priority categories, including preemptive tasks and at least one task (i.e., cooperative task) that voluntarily yields control of the processor. Lake and Bower never describe a BIOS that enables each initialization task to execute both preemptively and cooperatively, as in Independent Claim 15.

As discussed above, the combination of Lake and Bower does not disclose all the claim limitations of Independent Claim 15. Therefore, it is respectfully submitted that Independent Claim 15 is patentable over the combination of Lake and Bower and is in condition for allowance.

Dependent Claims 19-20 are dependent on allowable Independent Claim 15, which is allowable over the combination of Lake and Bower. Hence, it is respectfully submitted that Dependent Claims 19-20 are patentable over the combination of Lake and Bower for the reasons discussed above.

Claims 16-18 stand rejected under 35 U.S.C. 103(a) as being unpatentable over Lake, U.S. Patent Application Publication No. US2004/0045003 (hereafter Lake) in view of Bower, U.S. Patent No. 7,051,331 (hereafter Bower) and further in view of Shi et al., U.S. Patent No. 6,757,897 (hereafter Shi). These rejections are respectfully traversed.

Dependent Claims 16-18 are allowable over the combination of Lake and Bower because they are dependent on Independent Claim 15, which is allowable over the combination of Lake and Bower. Moreover, Shi fails to disclose claim limitations of Independent Claim 15 not shown by the combination of Lake and Bower. In particular, Shi does not disclose, “wherein said BIOS is operative to enable any initialization task irrespective of priority value to request a particular waiting period during execution of said initialization task... wherein said BIOS uses said preemptive multitasking to enable each initialization task to preempt execution of another initialization task based on said requested particular waiting period elapsing, said priority values, and a plurality of statuses associated with said initialization tasks, and wherein said BIOS uses said cooperative multitasking to enable each initialization task to suspend execution of itself in a cooperative manner for duration of said requested particular waiting period,” (emphasis added) as recited in Independent Claim 15. Therefore, Independent Claim 15 is patentable over the combination of Lake, Bower, and Shi and is in condition for allowance. Since Dependent Claims 16-18 depend from Independent Claim 15, Dependent Claims 16-18 are patentable over the combination of Lake, Bower, and Shi and are in condition for allowance.

CONCLUSION

It is respectfully submitted that the above claims, arguments and remarks overcome all rejections and objections. All remaining claims (Claims 1-20) are neither anticipated nor obvious in view of the cited references. For at least the above-presented reasons, it is respectfully submitted that all remaining claims (Claims 1-20) are in condition for allowance.

The Examiner is urged to contact Applicant's undersigned representative if the Examiner believes such action would expedite resolution of the present Application.

Respectfully submitted,

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